5. References:

1. Morgan, G.T. and Kdrew, H.D.; (1920)**,** Researches on residual affinity and co-ordination. Part II. Acetylacetones of selenium and tellurium, *J. Chem. Soc*, **117,** 1456.
2. Walton, H.F.; (1952)**,** Electron donor atom *Principles and methods of Chemical Analysis*. Prentice Hall, 85.
3. Fegal, F.; (1949) *Chemistry of Specific, Selective and Sensitive Reagents* Academic Process, **2**.
4. Godyeki, L.E. and Rundle, R.E.; (1953) The structure of nickel Dimethylglyoxime *Act Cryst*. **6** , 487.
5. Fox, B.B.; Halland, J. R. and Plowman, R.A.; (1962) Coordination Compounds of Substituted 1,10-Phenanthrolines and Related Dipyridyls. II. Complexes of Iron and 2,9-Dimethyl-1,10-phenanthroline, *Australian J. Chem.* **15(2)**, 235-241.
6. Werner, A.; (1920)Complex formation *Natural Anschaugenl* 4th ed., vieweg Brauncheveg.,1-23.
7. Lewis, G.N.; (1916) The atom and the molecule, *J. Amber. Chem. Soc.;*38, 762
8. Langmuir, I.; (1919)The arrangement of electrons in atoms and molecules. *J. amer, Chem. Soc;*, **41**, 868.
9. Sidgwick, N. V.; (1923) The nature of the non-polar link, *J. Chem Soc***, ,19**, 469-475.
10. Stephen, W.I., (1977) Historical survey of the uses of organic compounds as reagents in analytical chemistry, *Analyst*, **102**, 793.
11. Burgess, *J.*, (1978)**,** *Metal Ions in Solution*, ,Wiley, New York.
12. Inczedy, *J.*,(1976) *Analytical Application of Complex Equilibria*, **,**Akademiai Kiado, Budapest, and Horwood, Chichester.
13. Philips, J. P.; (1956) The Reactions Of 8-Quinolinol, *Chem. Review*, **56(2)**, 271.
14. Nimavat K. S., Popat K. H. and Joshi H. S.; (2002) Synthesis and pharmacological evaluation of 6-carbethoxy-5-(3'-bromophenyl)-3-aryl-2-cyclohexenones and 6-

aryl-4-(3'-bromophenyl)-3-oxo-2,3a,4,5-tetrahydro-2h-indazoles, *Journal of Sciences*, Islamic Republic of Iran, **13(4)**, 323-326.

15. Block, S. S.; (1955)*Agr. and Food Chem.*Chelate Fungicides, Fungitoxicity of 8-Quinolinols, ,**3**, 229-234.

16. Abdel Mohsen and Shawkat, A.;(2003**)** Heterocycles Derived from 5-(2-Aminothiazol-4-yl)-8-hydroxyquinoline: Synthesis and Antimicrobial Activity.*J. of Chinese Chem. Soc*, **50(5)**, 1085-1092.

17. Jain M., Khan S.I., Tekwani B.L., Jacob M.R., Singh S., Singh P., Jain R., (2005)Synthesis, antimalarial, antileishmanial, and antimicrobial activities of some 8-quinolinamine analogues, *Bioorganic & Medicinal Chemistry*, **13(14)**, 4458-4466.

18. Kaur K., Patel S.R., Patil P., Jain M., Khan S.I., Jacob M.R., Ganesan S., Tekwani B.L., Jain R. (2007)Synthesis, antimalarial, antileishmanial, antimicrobial, cytotoxicity, and methemoglobin (MetHB) formation activities of new 8-quinolinamines, *Bioorganic & Medicinal Chemistry*, **15(2)**, 915-930.

19. Ma X.H., Zhang X.Y., Tan J.J., Chen W.Z., Wang C.X. (2004) Exploring binding mode for styrylquinoline HIV-1 integrase inhibitors using comparative molecular field analysis and docking studies, *Acta Pharmacol Sin.*, **25(7)**, 950-958.

20. Zouhiri F., Mouscadet J.F., Mekouar K., Desmaele D., Savoure D., Leh H., Subra F., Le Bret M., Auclair C., D'Angelo J. (2000) Structure-activity relationships and binding mode of styrylquinolines as potent inhibitors of HIV-1 integrase and replication of HIV-1 in cell culture. *J. Med. Chem.*, **43**, 1533-1540.

21. Henry Ch., Rakba N., Imbert D., Thomas F., Baret P., Serratrice G., Gaude D., Pierre J., Ward R.J., Crichton R.R., Lescoa G. (2001) New 8-hydroxyquinoline and catecholate iron chelators: influence of their partition coefficient on their biological activity *Biochemical Pharmacology*, **62(10)** 1355-1362.

22. Małecki J.G., Kruszynski R., Mazurak Z. (2007)The reactions of 8-hydroxyquinoline with [RuHCl(CO)(PPh_3)$_3$]: A new ruthenium(II) carbonyl complex with a N- donor ligand, *Polyhedron*, **26(15)**, 4201-4208.

23. Georgieva N. (2005a)Drug design by regression analyses of newly synthesized derivatives of 8-quinolinol, *Trakia Journal of Sciences,* **3(2)**, 34-37.

24. Georgieva N. (2005b)*Journal of Animal* Science,**) 62(6)**, 59-62. (in Bulgarian)

25. Pavlov A., Georgieva N., Yaneva Z., Dospatliev L., Koinarski V. (2010) Aliphatic and arylaliphatic ethers of 5,7-dihalogen-8-hydroxyquinolines and their perchlorates as potential nutritive and anticoccidial remedies *Journal of Animal Science*, **67(1)**, 69-75. (in Bulgarian)

26. Pearce, D. A.; Jotterand, N.; Carrico, I. S.; Imperiali, B. (2001) Derivatives of 8-Hydroxy-2-methylquinoline Are Powerful Prototypes for Zinc Sensors in Biological Systems, *J. Am.Chem. Soc*. *123*, 5160.

27. Leung, L. M.; Lo, W. Y.; So, S. K.; Lee, K. M.; Choi, W. K. (2000) A High-Efficiency Blue Emitter for Small Molecule-Based Organic Light-Emitting Diode,*J.Am. Chem. Soc*., ***122***, 5640. (b) Devol, I.; Bardez, E**.**(1998) Complexation of Al(III) by 8- Hydroxyquinoline and Drastic Fluorescence Enhancement in Reverse Micelles*J.Colloid Interface Sci*. ***200***, 241

28. Pohl, R.; Montes, V. A.; Shinar, J.; Anzenbacher Jr., P. (2004) Red−Green−Blue Emission from Tris(5-aryl-8-quinolinolate)Al(III) Complexes., *J. Org.Chem*. **69(5)**, 1723.

29. Valeur, B.; Leray, I. (2000) Design principles of fluorescent molecular sensors for cation recognition *Coord. Chem. Rev*. ***205,*** 3.

30. Barkhater, J.H. and Teib, R.I.; (1961)Amino- and Chloromethylation of 8-Quinolinol. Mechanism of Preponderant ortho Substitution in Phenols under Mannich Conditions, *J.org.chem.*, **26**, 4078.

31. Zinner, H. and Fielder, H.; **(1958)** Reaktionen von Chinolin-Derivaten mit Formaldehyd,***Arch.Pharm.*** **291**, 493-502.

32. Victor, D.; Jayant, S. and Dale, M.; (1976) Synthesis and in vitro evaluation of 8-hydroxyquinoline analogs as inhibitors of dental plaque, *j.med.chem,***19**,167.

33. Juerjen, H. And Hermaan, R.; (1981) 5-(Ureido-, Guanidino- und Biguanido-methyl)-8- hydroxychinoline, *Arch pharm*, **314**, 731-733.

34. Toshiki, H. and Mutoyama, U.J.; **(1987)*Jud patent,* 63**, 238060.

35. Peneloke, D.; (1983)*Eur. Patent***,** 1251052.

36. Gheargh, B. and Pielura, P.; (1979)*Ram, patent*, **77**,915,.

37. Hermaan, R. and Hoeskens, J.; (1982) Synthese und komplexierende Eigenschaften symmetrischer N,N′-Tetra-(8-hydroxychinolyl-5-methyl)-α,ω-diaminoalkane, *Arch pharm*, **315**, 131-135.

38. Yan, Xi.; Alenxiang, Z.; Shourang, Z. and Haakann, L.; (2000) *Beging shitam daxue xuebao Ziram Kexyebam*, **36**, 221.

39. Gilbert, R.; Claude, G. and Jean, L.; (1984)*Eur. patent.*, **148**, 167.

40. Abraham, W.; Rani, K. and Abrahaks, P.; (1976) *U.S.Patent*, **4317887.**

41. Katshutoshi, L. and Hideaki, L.; (1998), *Japan patent*, 1017953.

42. Kenichiro, A.; Zaaea, T. and Sakurasaaea, T.; (2001) seni *GAKKAISKI*, **57**, 229,.

43. Taka, H.; Kazuhisa, H. and Kasaburo, O.; (1974)Lithium Isotope Fractionation during Transport through Liquid Membrane with Oligomethylene-bridged Bisphenanthroline Derivatives, *Chemical letter*, **3**, 615.

44. Manolova, M.; Janatova, M. and Rushkav, J.; (1998) Preparation and metal ion complexing ability of polyethers with 8-hydroxy-5-quinolinyl end-groups *Eur.Poly J.*, **34**, 1133-1123.

45. Warshaasky, A.; (1977) Determination of silver and mercury bound to polystyrene incorporating isothiourea groups, *Chem. Spec vol*. **21**, 45.

46. Patel, B.P.; (2000) Co-ordination Polymers of 5,5′-[1,4-*N*,*N*′-Dimethylene Piperazinylene]-8-Quinolinol (DMPQ), *Int. J. Polym. Mater*. **46 ,**1-9.

47. Patel, R.D.; Patel, H.S. and Patel, S.R.; (1987) Co-ordination polymers of bis (8-hydroxy-5-quinolylmethylene) sulphide (BHQS), *Eur. Polym. J.*,**23**, 229.

48. Patel, H.S.; Raj, L.M.; Shah, T.B. and Raj, M.M.; (1999) Co-ordination polymers of 7,7′- [1,4-N,N′-dimethylene piperazinylene]-8-quinolinol (DMPQ), *Eur.polym. J.*, **35**, 1537-41.

49. Patel, H.S.; Dixit, R.B. and Shah, T.B.; (2001) Co-ordination Polymers of 1,6-bis(8- hydroxyquinolin-5-yl)-2,5-dioxa-3-methyl hexane,*Int. J. Polym. Material*., **49**, 271-281.

50. Vohra I.M., (2006) *Phd. Thesis, VNSGuni. Surat*.

51. Manolova N.,M., Ignatova., Rashkov I., 1998 Preparation and metal ion complexing ability of polyethers with 8-hydroxy-5-quinolinyl end-groups *European Polymer Journal*, **34(8)**, 1133–1141

52. Patel Khyati D. & Patel Hasmukh S., (2011) Synthesis, Characterization and In Vitro Antibacterial Activity of Coordination Polymers Based on Bis Bidentate Ligand *International Journal of Polymeric Materials*, **60(8)**,518-528

53. Verma Aradhana, Iqbal S. A., Singh Arun and Liviu mitu, (2010) Synthesis, Characterisation, Spectral and Microbial Studies of Transition Metal Complexes of the Drug, Secnidazole *E-Journal of Chemistry*, **7(S1)**, S520-S526

54. Patel Paresh N., Patel Khyati D., Patel Hasmukh S., (2011) Synthesis and biological study of novel 5-{(4-(6,7-dihydrothieno-[3,2-c]pyridin-5(4*H*)-ylsulfonyl)phenylamino)-methyl}quinolin-8-ol and its metal complexes *Applied organomettalic chemistry***, 25(2),** 1297-1300.

55. Patel Hasmukh S. & Patel Darshana J. ,(2010) Coordination Polymers Based on Bis- Ligand-Containing Indole and 8-hydroxyquinoline Moieties *International Journal of Polymeric Materials*, **59(5),** 307-317.

56. Shah T. B., Patel H. S., Dixit R. B. & Dixit B. C.,(2003) Coordination Polymers of 1,8- Bis(8-Hydroxyquinolin-5-yl)-2,7-Dioxaoctane.,*International Journal of Polymer Analysis and Characterization,* **8(6),** 369-381.

57. Dixit R. B., Shah T. B.,& Patel H. S., (2001)Co-ordination Polymers of 1,6-bis(8- hydroxyquinolin-5-yl)-2,5-dioxa-3-methyl hexane *International Journal of Polymeric Materials***, 49(3)**, 271-281

58. Takayuki Iijima,Takakazu Yamamoto, (2004) Preparation of Main-Chain-Type Quinolinol Polymers by Organometallic Polycondensation *Macromolecular Rapid Communications,* **25 (5)**, 669–672,

59. Singh Arun & Bhanderi Jayesh, (2008)Poly(Ester Amide) with Pendent 8-Quinolinol Moiety as a Novel Oligomeric Ligand *International Journal of Polymeric Materials,* **58(2)**,111-119

60. Yunhai Liu, Xiaohong Cao, Zhanggao Le, Mingbiao Luo, Wenyuan Xu and Guolin Huang, (2010) Pre-Concentration and Determination of Trace Uranium (VI) in Environments using Ion-imprinted Chitosan Resin *via* Solid Phase Extraction, *J. Braz. Chem. Soc.*, **21 (3)**, 533-540.

61. Oza Kaushal K., Jani Darshan H., Patel Hasmukh S., (2011) Antibacterial, spectral and thermal aspects of some novel first transition metal-based Heterochelates,*Applied organomettalic chemistry,* **25(2)**,154-161.

62. Zidan A. S. A., (2002)Studies on some transition metal mixed Ligands complexes, *Journal of Thermal Analysis and Calorimetry,* 68 ,1045–1059

63. Mauro Ghedini, Iolinda Aiello, Massimo La Deda and Annarita Grisolia, (2003) Mixed 2-phenylpyridine and 5-substitued-8-hydroxyquinolines palladium(II) complexes: new emitters in solutions at room temperature. *Chem. Commun.*, 2198–2199

64. Shah T. B., Dixit R. B., and Dixit B. C., (2008) Novel polymeric chelates of 8-hydroxyquinoline-dimethylolacetone *Journal of Thermal Analysis and Calorimetry,* **92(2)**, 505–512

65. Shayma A Shaker,,Yang Farina, Abbas A . Salleh, ,(2009) Synthesis and characterization of mixed ligand complexes of 8-hydroxyquinoline and o- hydroxybenzylidene-1-phenyl-2-3-dimethyl-4-amino-3-pyrazolin-5-on with Fe (ii) Co (ii), Ni (ii) and Cu (ii) ions. *European Journal of Scientific Research,*. **33(4)**, 702-709

66. Yong-chum.Zheng-yin Yang, (2009) Crystal structures, antioxidation and DNA binding properties of yb (iii) complexes with schiff- base ligands derived from 8-ydroxyquinoline -2- carbaldehyde and four aroylhydrazines *Biometals,* **22**:733-751

67. Kharadi G.J., Patel K. D., (2009) Synthesis, spectroscopic, thermal and biological aspect of mixed ligand copper (ii) complexes, *Therm Anal Calorim (Springer),* **96**, 1019-1028

68. Shumei Zhai.Lei ,Yang.Qiuzhi Cindy Cui,Ying Sun.Q.ping Dou. Bing Yan., ,(2009) Tumor cellular proteasome inhibition and growth suppression by 8-hydroxyquinoline and clioquinol requires their capabilities to bind copper and transport copper into cells. *J Biol Inorg Chem***, 15**,259-269

69. Kharadi G.J., Patel J.R. and Dholakiya B.Z.**,** ,(2010) Antituberculosis, antifungal and thermal activity of mixed ligan transition metal complexes *Applied Organometallic Chemistry***.24(11),**821-827.

70. Panchani S.C., Kharadi G.J., Patel K.D., (2010), Coordination polymeric chain assemblies of some metal ions with BHQPP, *International Journal of Polymeric Materials***,, 59**, 60-72

71. Patel K. D., Panchani,S. C. Kharadi G.J., (2010) Studies on some coordination polymeric chains of metal ions with QM1N, *International Journal of Polymeric Materials,* **59**,577-587.